

Contract No: EP-W-09-002  
WA #: 077-RSBD-02MV

# Region 2 RAC2 Remedial Action Contract

## Field Oversight Report No. 1

Pierson's Creek Site

Remedial Investigation/ Feasibility  
Study Oversight

Newark, New Jersey

December 20, 2018

**CDM  
Smith**

**Pierson's Creek Superfund Site, OU2**  
**Remedial Investigation/Feasibility Study Oversight**  
**Field Oversight Report 1**  
**December 3, 2018 – December 14, 2018**

This field oversight report summarizes oversight of the field activities performed between December 3 and December 14, 2018 by Geosyntec Consultants (Geosyntec) at the Pierson's Creek Superfund Site Operable Unit 2 in Newark, New Jersey. CDM Smith was onsite for five of the 10 working days performing oversight of the Remedial Investigation/Feasibility Study field activities. CDM Smith performed oversight of the above field activities as described in the CDM Smith Final QAPP (July 2018). Specific details of activities observed are included below and in the following attachments:

- **Attachment I:** Table summarizing the split samples collected to date.
- **Attachment II:** Daily quality control reports (DQCRs) submitted between December 3, 2018 and December 14, 2018 summarizing daily field oversight activities. The DQCRs provide additional details for oversight activities performed by CDM Smith.
- **Attachment III:** Photos taken between December 3, 2018 and December 14, 2018 showing daily field and sampling activities.

**Personnel Onsite**

**EPA**

Pamela Tames (12/10)

Michael Sivak (12/10)

**CDM Smith**

Emily Wong (12/3)

Jeff Rakowski (12/3, 12/4, 12/10, 12/13, 12/14)

**Troy Chemical**

Bill Reilley (intermittently to coordinate access)

Al Gerardo (intermittently)

**Geosyntec**

Rachel Gross (12/3, 12/10)

Doug Mateas (12/3 through 12/14)

Matt Mray (12/10 through 12/14)

Laura Pasquine (12/4, 12/10 through 12/14)

**Summit Drilling**

(12/3 through 12/14)

**Field Activities Observed During this Reporting Period:**

- Supplemental Surface Soil Sampling (12/03/18 – 12/04/18)
- Shallow Monitoring Well Installation (12/10/18, 12/13/18)
- Supplemental Soil Boring Sampling (12/13/18 - 12/14/18)
- Vapor Intrusion Investigation (12/13/18)

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**Supplemental Surface Soil Sampling Oversight (12/03/18– 12/04/18)**

Summary of Events:

Oversight of the supplemental surface soil sampling was conducted at Pierson's Creek OU2 from 12/03/18 to 12/04/18. At each sample location concrete was cored or jackhammered from the surface, and soils were collected between 0 and 24 inches below the slab with a hand-auger. The soil extruded from the hand auger was placed on clean plastic sheeting for observation and sample collection. The hand-auger was decontaminated between each sample depth collected.

All twelve of the proposed surface soil locations have been sampled. CDM Smith observed collection of eight of the twelve surface soil samples while onsite, including: GS-SS-101, GS-SS-103, GS-SS-106, GS-SS-107, GS-SS-108, GS-SS-109, GS-SS-111, and GS-SS-112.

Split Samples accepted:

A total of five surface soil split samples were accepted and are summarized on Attachment I:

- The following split samples were accepted and sent to ChemTEch Laboratories (ChemTech) for target compound list (TCL) semi-volatile organic compounds (SVOCs), polychlorinated biphenyl (PCBs) as Aroclors, and target analyte list (TAL) metals plus mercury analyses: GS-SS-101-001-CDM, GS-SS-101-002-CDM, GS-SS-111-001-CDM.
- The following split samples were accepted and sent to ChemTech for TCL volatile organic compound (VOCs) analysis: GS-SS-101-003-CDM, GS-SS-111-003-CDM.

Significant Observations/Deviations:

Surface soil samples often did not reach the prescribed depth of 2 feet bgs at multiple locations due to auger refusal when encountering fill materials. The scope of work under Section 4.2.1 (Supplemental Surface Soil Sampling) of the Geosyntec RI/FS workplan states the following, which was not achieved: "Surface soil samples will be collected at 0 to 2 feet below the pavement/asphalt layer". The contractor made reasonable efforts to collect the samples and typically sample depths were within 6-inches of the 2-foot depth.

- CDM advised Geosyntec during photographic documentation of a soil sample on their processing table as their signage was backwards (i.e. bottom/top of boring).

**Shallow Monitoring Well Installation (12/10/18, 12/13/18)**

Summary of Events:

Oversight of the shallow monitoring well installation and associated soil sampling was conducted on 12/10/18 and 12/13/18. The shallow monitoring wells were drilled and installed to set the screens across the water table and were completed with PVC casing and screen, sand, bentonite, a well plug, a well pad, and a flush-mount or stickup. One soil sample was collected from each screened interval for TCL VOCs, SVOCs, PCBs, TAL metals, mercury, and extractable petroleum hydrocarbon (EPH).

Installation of all four proposed shallow monitoring wells was completed. CDM Smith observed installation of three of the four shallow monitoring wells while onsite including: GS-MW-101, GS-MW-103, and GS-MW-104.

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*Split Samples accepted:*

No soil split samples were collected of soil samples collected during shallow monitoring well installation.

*Significant Observations/Deviations:*

GS-MW-101 was installed 8 feet northeast of the proposed location. During advancement of the borehole at the proposed well location concrete and other fill prevented successful advancement of the borehole. The proposed well was re-located approximately 8-feet to a grassy area in front of the northern fenceline.

**Supplemental Soil Boring Sampling (12/13/18 – 12/14/18)**

*Summary of Events:*

Oversight of supplemental soil boring installation was conducted at Pierson's Creek, OU2 on 12/13/18 and 12/14/18. At each sample location, concrete was cored or jackhammered from the surface prior to beginning boring advancement. A hand-auger was used to collect soils from the upper portion of each borehole until refusal was encountered. Once the hand auger met refusal, geoprobe macrocores were advanced to the base of each borehole. Multiple boreholes were often attempted at each location in order to hand-auger as deep as possible to avoid buried utilities, before attempting to drill to depth.

All thirteen of the proposed supplemental soil borings have been completed. CDM Smith observed sampling at 6 of the 13 locations while onsite, including: GS-B-101, GS-B-104, GS-B-106, GS-B-107, GS-B-112, and GS-B-113. One additional soil boring location is planned for the access road on the northern side of Troy Chemical property, at the location of the former culvert. The schedule for this boring is to be determined based on access to road.

*Split Samples accepted:*

A total of five soil boring split samples were accepted and are summarized on Attachment 1 – Split Sample Summary:

- The following split samples were accepted and sent to ChemTech for TCL SVOCs, PCBs, TAL metals, and mercury analyses: GS-B-112-001-CDM, GB-101-001-CDM.
- The following split samples were accepted and sent to ChemTech for VOC analysis: GS-B-112-004-CDM, GS-B-106-004-CDM, and GS-B-101-001-CDM

*Significant Observations/Deviations:*

At location GS-B-106, Geosyntec's field vehicle was running directly behind the sample processing table when cores were being opened. CDM Smith advised Geosyntec of the situation and recommended that the vehicle be turned off to avoid vehicle emissions potentially impacting the samples. The vehicle was immediately shut-off.

**Vapor Intrusion Investigation (12/13/18)**

*Summary of Events:*

Building surveys as part of the vapor intrusion investigation were performed throughout the week. Oversight of the process was performed at Building 91A, which included building dimension measurements, photos of cracks within the building, an employee survey, documenting chemicals



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and equipment stored, differential pressure monitoring, smoke testing, and health and safety monitoring using a photoionization detector (PID) and mercury vapor meter.

*Split Samples accepted:*

Vapor intrusion sampling has not yet been scheduled.

*Significant Observations/Deviations:*

No significant observations or deviations were observed.

## Attachment I

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### Split Sample Collection Summary

December 3, 2018 – December 14, 2018

Pierson's Creek Superfund Site, OU2

Remedial Investigation/Feasibility Study Oversight

Newark, New Jersey

**Attachment I**  
**Split Sample Collection Summary**  
**December 3, 2018 – December 14, 2018**  
**Pierson's Creek Superfund Site, OU2**  
**Remedial Investigation/Feasibility Study Oversight**  
**Newark, New Jersey**

Sample ID	Depth (feet bgs)	Date Collected	Parameters Collected	Notes
GS-SS-101-001-CDM	0-0.5	12/4/2018	Aroclors, semi-volatile organic compounds, and total metals + Hg	-
GS-SS-101-002-CDM	0.5-0.75	12/4/2018	Aroclors, semi-volatile organic compounds, and total metals + Hg	-
GS-SS-101-003-CDM	0.5-0.75	12/4/2018	VOCs	-
GS-SS-111-001-CDM	0-0.5	12/4/2018	Aroclors, semi-volatile organic compounds, and total metals + Hg	-
GS-SS-111-003-CDM	1-1.5	12/4/2018	VOCs	PID reading: 132 ppm
GS-B-112-001-CDM	0-2	12/13/2018	Aroclors, semi-volatile organic compounds, and total metals + Hg	-
GS-B-112-004-CDM	3-5	12/13/2018	VOCs	PID reading: 2.5 ppm
GS-B-106-004-CDM	3-5	12/13/2018	VOCs	PID reading: 0.8 ppm
GS-B-101-001-CDM	0-2	12/14/2018	Aroclors, semi-volatile organic compounds, and total metals + Hg	-
GS-B-101-004-CDM	0-2	12/14/2018	VOCs	PID reading: 47 ppm

**Acronyms:**

Bgs: below ground surface

CDM: CDM Smith

Hg: mercury

ID: identification

PID: photoionization detector

ppm: parts per million

VOCs: volatile organic compounds

## Attachment II

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Daily Quality Control Reports

December 3, 2018 – December 14, 2018

Pierson's Creek Superfund Site, OU2

Remedial Investigation/Feasibility Study Oversight

Newark, New Jersey

**Pierson's Creek Superfund Site OU2 – Troy Chemical Corporation  
City of Newark, Essex County, New Jersey  
Daily Quality Control Report**

**DATE:** Monday, December 3, 2018

**Contractors and Personnel Onsite:** Emily Wong (EW) and Jeff Rakowski (JR) from CDM Smith; Rachel Gross (RG) and Doug Mateas (DM), from Geosyntec Consultants (GC); Kevin Barber (SM) and two assistants from Summit Drilling (SD); Bill Reilly (BR) from Troy Chemical (TC).

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temperature	To 45 ° F	32 to 50 ° F	50 to 70 ° F	70 to 85 ° F	85+ ° F
Wind	Still	Moderate	High	Mostly cloudy with moderate winds, 55 ° F	
Humidity	Dry	Moderate	Humid		

**Daily Health and Safety Meeting Completed:** PPE in use at Site includes safety glasses, steel-toe boots, and hi-visibility vests.

**Description of Field Activities**

0830: EW and JR onsite at Troy Chemical to attend health and safety meeting led by BR. All personnel from GC and SD onsite.

0900: All onsite personnel from CDM Smith, GC, SD, and TC begin site walk to discuss sampling plans and confirm locations.

1145: GC and SD crews begin setting up for first sampling location at S-107.

1200: EW and JR unload equipment into designated work area provided by TC. JR begins organizing and labeling glassware for upcoming split sample collection.

1230: EW joins GC and SD crews and BR at S-107 to observe sampling procedures. SB crew hand clearing down to 2 feet bgs using hand auger.

1315: GC completes sample collection at S-107. SD patching S-107 and removing asphalt layer from S-108 and S-109. SB crew begin hand clearing at S-108 to 2 feet bgs using hand auger.

1400: GC completes sample collection at S-108. SB begins patching S-108 and starts hand clearing at S-109 to 2 feet bgs using hand auger.

1445: GC completes sample collection at S-109.

1500: SB begins removing asphalt layer at S-106 and starts hand clearing down to 2 feet bgs using hand auger.

1600: GC completes sample collection at S-106. SB begins patching S-106. GC and SB crews begin packing up equipment. All work complete.

**Issues/Problems Encountered/Deficiencies/Deviations and Resolutions**

No problems encountered.

**See attached photos**

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**12-04-18 – SD crew begin removing asphalt layer at S-106.**



**11-01-2018 – Surface soil retrieved from S-106 between 0-2 feet bgs.**

**Pierson's Creek Superfund Site OU2  
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City of Newark, New Jersey  
Daily Quality Control Report**

**DATE:** Tuesday, December 4, 2018

**Contractors and Personnel Onsite:** Jeff Rakowski (JR) from CDM Smith; Doug Mateas (DM) and assistant from Geosyntec Consultants (GC); Kevin Barber (SM) and two assistants from Summit Drilling (SD); Bill Reilly (BR) from Troy Chemical (TC).

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temperature	To 45 ° F	32 to 50 ° F	50 to 70 ° F	70 to 85 ° F	85+ ° F
Wind	Still	Moderate	High	Mostly cloudy with moderate to high winds	
Humidity	Dry	Moderate	Humid		

**Daily Health and Safety Meeting Completed:** PPE in use at Site includes hard hat, safety glasses, safety-toe boots, and hi-visibility vests.

**Description of Field Activities**

0715: JR onsite and awaits access to building 99 to gather supplies.

0735: JR informed that the team is behind schedule this morning.

08:40 Daily safety kickoff covering safety requirements and expectations held by Geosyntec.

08:55 Coring of GS-SS-101 location begins.

10:12 JR accepts GS-SS-101-001-CDM split sample (0-6 inches below ground surface [bgs]) for Aroclors, semi-volatile organic compounds, and total metals + Hg. GS-SS-101 is located in the northeast corner of the property.

10:45 JR accepts GS-SS-101-003-CDM split sample (6-9 inches bgs) for volatile organic compounds.

10:55 JR accepts GS-SS-101-002-CDM split sample (6-9 inches bgs) for Aroclors, semi-volatile organic compounds, and total metals + Hg.

11:05 JR starts processing samples collected and updates scribe database.

11:50 JR is informed that location SS-112 ended up being too close to the ditch in the northern portion of the property. No soil was present as there is a cavity between the concrete and the underlying water at the proposed location. This location will be moved and reattempted later today.

13:00 Coring begins on SS-111.

13:42 JR accepts GS-SS-111-001-CDM split sample (0-6 inches bgs) for aroclors, semi-volatile organic compounds, and total metals + Hg.

13:55 JR accepts GS-SS-111-003-CDM split sample (12-18 inches bgs) for volatile organic compounds. PID reading was 132 ppm at this interval.

14:15 JR populates scribe, airbill, and prints chain of custody and packs cooler with samples and ice.

15:30 Cooler is sealed. Geosyntec has collected SS-103 and has reattempted and collected SS-112.

16:15: JR departs site and ships split samples.



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**Split Sample Summary**

<i>Sample Identification</i>	<i>Depth Collected in inches (bgs)</i>	<i>Parameters Collected</i>	<i>Notes</i>
GS-SS-101-001-CDM	0-6	Aroclors, semi-volatile organic compounds, and total metals + Hg	
GS-SS-101-002-CDM	6-9	Aroclors, semi-volatile organic compounds, and total metals + Hg	
GS-SS-101-003-CDM	6-9	Volatile organic compounds	
GS-SS-111-001-CDM	0-6	Aroclors, semi-volatile organic compounds, and total metals + Hg	
GS-SS-111-003-CDM	12-18	Volatile organic compounds	PID reading 132 ppm

**Issues/Problems Encountered/Deficiencies/Deviations and Resolutions**

1. Samples to 2 feet in depth have not been realized at multiple locations due to concrete and fill creating refusal.
2. CDM corrected Geosyntec during picture collection of soil on their processing table as their signage was backwards (i.e. bottom/top of boring).

**See attached photos**



**12-04-18 – Cavity at initial SS-112 location due to adjacent culvert.**

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**12-04-2018 – Pictures and depths taken at each interval.**

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**DATE:** Monday, December 10, 2018

<b>Contractors and Personnel</b>	Michael Sivak (MS), Pam Tames (PT) (USEPA) Jeff Rakowski (JR) from CDM Smith;
<b>Onsite:</b>	Doug Mateas (DM), Rachel Gross (RG), Matt Mray (MM) from Geosyntec Consultants (GC); Summit Drilling (SD); Bill Reilly (BR) from Troy Chemical (TC).

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temperature	0 to 32 ° F	32 to 50 ° F	50 to 70 ° F	70 to 85 ° F	85+ ° F
Wind	Still	Moderate	High	Mostly clear with moderate wind.	
Humidity	Dry	Moderate	Humid		

<b>Daily Health and Safety Meeting Completed:</b>	PPE in use at Site includes hard hat, safety glasses, safety-toe boots, and hi-visibility vests.
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**Description of Field Activities**

1055: JR onsite.

1115: JR unloads bottle-ware into building 99.

11:25 JR meets with BR to go over progress to date.

11:35 Arrive at location GS-MW-10. This location has been drilled down to 10 feet bgs as planned. Meadow matt was not reached at this depth.

12:05 MM informs JR that he has been filling out the NJDEP building survey forms based on information that BR has provided.

12:20 DM takes headspace readings on GS-MW-10 soil. VOCs were recorded throughout the boring with the highest level from 0-1.5 feet bgs at 108.1ppm.

12:30 JR meets MS and PT onsite and informs them of today's progress.

12:40 JR observes work at GS-MW-101. Air-knifing at this location has failed. SD has jackhammered at this location for 1.5 hours to a depth of 7 inches bgs (estimated depth 12 inches).

12:50 JR joins MS and PT on site walk.

13:45 JR labels bottle-ware and updates scribe for Wednesday's sampling.

14:45 JR is informed that the water table was encountered at 1.5 feet bgs at proposed location GS-MW-104 during air-knifing. Due to the water Geosyntec will request permission from Troy to drill through concrete at this location.

15:00 GS-MW-101 has been moved approximately 8 feet northeast toward fence-line, into a grassy area, as the proposed location met rig refusal below concrete (urban fill).

15:50 GS-MW-103 has been installed with PVC to 10 feet bgs, sand to 3 feet bgs, and bentonite to 1 foot bgs and a well plug. This location will need to be revisited for surface completion (well pad and flush-mount cover).

16:05 JR observed rinsate blank procedure. Rinsate sample was collected off of plastic spoon that is used for sample collection.

16:25 JR departs site.

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**Split Sample Summary**

Not applicable to today's activities.

**Issues/Problems Encountered/Deficiencies/Deviations and Resolutions**

1. Due to concrete depth and urban fill (brick, concrete, gravel) located directly underneath the concrete, drilling, air-knifing and jackhammering has been slow. Drillers met with refusal at certain locations, and soil recovery has been limited. As a result, progress is slightly behind schedule on installation of 4 shallow monitoring wells planned for Monday and Tuesday. JR will maintain communication with the Geosyntec field team regarding progress and potential issues affecting schedule.
2. The proposed location for GS-MW-101 has been moved off of concrete 8 feet to the northeast, toward the fence-line in grassy area due to rig refusal.
3. Informed Geosyntec that CDM Smith must be present for drilling of GS-B-113, the deep soil boring in the right-of-way near the former culvert. Geosyntec indicated they will keep JR informed on schedule for drilling of GS-B-113.

**See attached photos**



**12-10-18 – Rinsate blank collected with deionized water and plastic sample spoon.**

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**12-10-2018 – Soil recovery from 5 to 10 feet bgs at GS-MW-103.**

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**DATE:** Thursday, December 13, 2018

**Contractors and Personnel** Jeff Rakowski (JR) from CDM Smith;  
Doug Mateas (DM), Matt Mray (MM) and Laura Pasquine from Geosyntec Consultants (GC);  
**Onsite:** Summit Drilling (SD); Bill Reilly (BR) from Troy Chemical (TC).

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temperature	0 to 32 ° F	32 to 50 ° F	50 to 70 ° F	70 to 85 ° F	85+ ° F
Wind	Still	Moderate	High	Light snow in AM.	
Humidity	Dry	Moderate	Humid		

**Daily Health and Safety Meeting Completed:** PPE in use at Site includes hard hat, safety glasses, safety-toe boots, and hi-visibility vests.

**Description of Field Activities**

08:15: JR onsite.

08:35: JR meets DM at building 99 and requests better communication from Geosyntec, based on their frequent scheduling changes.

09:20 JR meets MM in Building 91A (shed with roll down door) to oversee building survey.

09:30 MM collects building dimensions.

09:40 JR takes photos of cracks in wall. Mercury vapor and PID meters being used for safety purposes were non-detect. Air-flow is moving from Building 91-A to Building 91 based on results from smoke testing and differential pressure meter.

10:10 JR arrives at GS-MW-103 to view well completion.

10:45 Jackhammering begins on asphalt at GS-B-106 location. Light snow has begun to fall.

11:00 JR takes photo of Summit Drilling hand auger below 4" of asphalt that has been removed at location GS-B-106.

11:10 JR observed sample table and soil collected directly behind running vehicle at GS-B-106. JR asked if the vehicle was going to be shut off, so it doesn't interfere with sample results. DM shuts off vehicle.

11:18 Drill Rig has reached 10' in depth. Meadow mat was not reached at this location.

11:25 Geosyntec is logging and checking cores for VOCs.

11:39 JR accepts GS-B-106-004-CDM split sample (36-60 inches bgs) for volatile organic compounds. The PID meter recorded 0.8ppm. No additional soil was available at GS-B-106 for split samples.

12:35 JR bags ice for cooler shipment.

13:55 JR accepts GS-B-112-001-CDM split sample (0-24 inches bgs) for aroclors, semi-volatile organic compounds, and total metals + Hg.

14:30 Geosyntec is monitoring VOCs from each depth at GS-B-112.

14:58 JR accepts GS-B-112-004 split sample (36-60 inches bgs) for volatile organic compounds. The PID meter recorded 2.5ppm.

15:25 JR observed jackhammering of GS-SB-113.



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15:30 JR prints chain of custody and seals cooler.

16:25 JR departs site.

**Split Sample Summary**

Not Applicable to today's activities.

<i>Sample Identification</i>	<i>Depth Collected in inches (bgs)</i>	<i>Parameters Collected</i>	<i>Notes</i>
GS-B-112-001-CDM	0-24	Aroclors, semi-volatile organic compounds, and total metals + Hg	
GS-B-112-004-CDM	36-60	Volatile organic compounds	PID 2.5ppm
GS-B-106-004-CDM	36-60	Volatile organic compounds	PID 0.8ppm

**Issues/Problems Encountered/Deficiencies/Deviations and Resolutions**

1. Geosyntec vehicle was running directly behind sample table when cores were being opened at GS-B-106. JR asked if the vehicle was going to be shutoff due to emissions effecting the samples. The vehicle was immediately shut-off.
2. Sample volume for split samples continues to be a problem due to use of dual-tube sample collection. Split sampling at shallow depths and volatile organic compounds are the only samples that are available. To date thee soil split samples for VOCs and two split samples for the full suite of contaminants have been collected. The goal is to collect five samples for VOCS and five samples for the full suite of contaminants with six to seven soil samples remaining to be collected.

**See attached photos**



**12-13-18 – Photo during Building Survey (91-A). This crack was smoke tested and checked with a differential pressure meter.**



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**12-10-2018 – Water level collected at GS-B-106.**

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**DATE:** Friday, December 14, 2018

**Contractors and Personnel** Jeff Rakowski (JR) from CDM Smith;  
Doug Mateas (DM) and Laura Pasquine from Geosyntec Consultants (GC); Summit Drilling  
**Onsite:** (SD); Bill Reilly (BR) from Troy Chemical (TC).

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temperature	0 to 32 ° F	32 to 50 ° F	50 to 70 ° F	70 to 85 ° F	85+ ° F
Wind	Still	Moderate	High	Light snow in AM.	
Humidity	Dry	Moderate	Humid		

**Daily Health and Safety Meeting Completed:** PPE in use at Site includes hard hat, safety glasses, safety-toe boots, and hi-visibility vests.

**Description of Field Activities**

08:05: JR onsite.

08:20: JR meets with DM. DM lets JR know that they are delayed due to waiting on work permit from BR and the geoprobe being blocked by a stack of pallets next to GS-B-113.

09:15 JR oversees collection of GS-B-101.

09:20 JR takes photo of extracted soil from GS-B-101.

09:25 JR takes photo of GS-B-101 which is located in front of building 9.

09:30 JR takes photo of Geosyntec's processing area.

09:35 JR accepts GS-B-101-001-CDM split sample (0-24 inches bgs) for aroclors, semi-volatile organic compounds, and total metals + Hg.

09:45 JR takes picture of meadow mat in sample sleeve which is located at approximately 9' bgs at GS-B-101.

10:00 JR accepts GS-B-101-004 split sample (0-24 inches bgs) for volatile organic compounds. The PID meter recorded 47ppm.

10:50 JR sends out yesterday's daily report.

12:45 Processing of GS-B-107 is complete. The Highest PID reading on this boring was 107ppm from 1 to 3 feet bgs. There was not enough volume at this boring to accept a split sample.

13:45 GS-B-104 from 0 to 1.5 bgs has been brought to processing area.

13:50 Hand auger refusal met at 2' bgs.

14:00 Drillers move over 5 feet to the northwest since hand augering only advance to a total of 2' bgs.

14:00 The second hole attempted has a second layer of concrete at 1' bgs. The drillers will move back to the initial hole and drill.

14:15 JR observes Geosyntec homogenizing the 0-2' bgs sample collected by hand auger.

14:35 Drilling commences in second hole.

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15:00 Not enough volume is available for a split sample. JR questions why the two holes are not composited. DM says that Chris Green and Rachel Gross instructed him not to composite samples due to contaminant concentration variations in holes.

15:20 JR informs Joe Button about the split sampling volume issue.

15:50 JR prints chain of custody and seals cooler.

16:20 JR departs site.

**Split Sample Summary**

Not Applicable to today's activities.

<i>Sample Identification</i>	<i>Depth Collected in inches (bgs)</i>	<i>Parameters Collected</i>	<i>Notes</i>
GS-B-101-001-CDM	0-24	Aroclors, semi-volatile organic compounds, and total metals + Hg	
GS-B-101-001-CDM	0-24	Volatile organic compounds	PID 47ppm

**Issues/Problems Encountered/Deficiencies/Deviations and Resolutions**

1. Sample volume for split samples continues to be a problem due to use of a dual-tube. Split sampling at shallow depths and volatile organic compounds are the only samples that are available.

**See attached photos**



**12-14-18 – Meadow matt found at approximately 9' bgs in GS-B-101 boring.**

**Pierson's Creek Superfund Site OU2  
Remedial Investigation/Feasibility Study Oversight  
City of Newark, New Jersey  
Daily Quality Control Report**



**12-14-2018 – Samples have been placed on clean sheeting for each borehole.**

## Attachment III

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### Photographic Documentation

December 3, 2018 – December 14, 2018

Pierson's Creek Superfund Site, OU2

Remedial Investigation/Feasibility Study Oversight

Newark, New Jersey



**Attachment III**  
**Photographic Documentation**  
**December 3, 2018 – December 14, 2018**  
**Pierson's Creek Superfund Site, OU2**  
**Remedial Investigation/Feasibility Study Oversight**  
**Newark, New Jersey**

12/03/18: Summit Drilling crew begin removing asphalt layer at S-106.



12/03/18: Surface soil retrieved from S-106 between 0-2 feet bgs.



**Attachment III**  
**Photographic Documentation**  
**December 3, 2018 – December 14, 2018**  
**Pierson's Creek Superfund Site, OU2**  
**Remedial Investigation/Feasibility Study Oversight**  
**Newark, New Jersey**

12/04/18: Pictures and depths taken at surface soil sample interval.



12/04/18: Cavity at initial SS-112 location due to adjacent culvert.



12/10/18: Soil recovery from 5-10 feet bgs at GS-MW-103.





Attachment III  
Photographic Documentation  
December 3, 2018 – December 14, 2018  
Pierson's Creek Superfund Site, OU2  
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12/10/18: Rig setup at GS-MS-103



12/10/18: Collection of rinsate sample.



**Attachment III**  
**Photographic Documentation**  
**December 3, 2018 – December 14, 2018**  
**Pierson's Creek Superfund Site, OU2**  
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**Newark, New Jersey**

12/13/18: Dual tube system providing minimal soil volume.



12/13/18: Photo during building survey (91-A). This crack was smoke tested and checked with a differential pressure meter.



12/13/18: Water level measurement collected at GS-B-106.





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**Pierson's Creek Superfund Site, OU2**  
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**Newark, New Jersey**

12/13/18: GS-MW-103  
completed at end of day.



12/13/18: Hand clearing GS-B-  
106.



**Attachment III**  
**Photographic Documentation**  
**December 3, 2018 – December 14, 2018**  
**Pierson's Creek Superfund Site, OU2**  
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12/13/18: Jackhammering GS-B-113.



12/13/18: View of soil processing setup.





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**Newark, New Jersey**

12/14/18: Geoprobe rig setup  
at GS-B-101.



12/14/18: GS-B-101 with  
meadow mat at 9 feet bgs.



12/14/18: Soil sample collection  
at GS-B-101.



**Attachment III**  
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12/14/18: VOC sample collection at GS-B-101.



12/14/18: Sample table setup.

